

WHAT IS CLAIMED IS:

1. A solid state imaging device comprising:
an imaging semiconductor chip in which all transistors are formed of
5 the same electric conductor; and
an image processing semiconductor chip comprising CMOS
transistors.
2. The solid state imaging device according to claim 1, wherein the
10 imaging semiconductor chip is stacked on the image processing
semiconductor chip.
3. The solid state imaging device according to claim 1, wherein all
transistors of the imaging semiconductor chip are formed as n-channel MOS
15 transistors.
4. The solid state imaging device according to claim 1, wherein all
transistors of the imaging semiconductor chip are formed as p-channel MOS
transistors.
- 20 5. The solid state imaging device according to claim 1, wherein the
imaging semiconductor chip comprises:
a photoelectric converter for converting light into an electric charge;
and
25 an amplifier for amplifying a signal that corresponds to the electric
charge generated by the photoelectric converter.
6. The solid state imaging device according to claim 1, wherein the
imaging semiconductor chip and the image processing semiconductor chip
30 are connected electrically by a bonding wire.
7. The solid state imaging device according to claim 1, wherein a
through electrode is provided in the imaging semiconductor chip, and the
imaging semiconductor chip and the image processing semiconductor chip
35 are connected electrically via wiring connected to the through electrode.
8. The solid state imaging device according to claim 7, wherein the

through electrode is a Si through electrode.

9. The solid state imaging device according to claim 1, wherein the image processing semiconductor chip comprises:

- 5 a timing generator for supplying a timing pulse to the imaging semiconductor chip;
a gain control amplifier; and
an analog/digital converter.

10 10. The solid state imaging device according to claim 2, wherein the image processing semiconductor chip comprises a plurality of terminals including a timing pulse output terminal for outputting a timing pulse,
the imaging semiconductor chip comprises a plurality of terminals including a timing pulse input terminal for receiving the timing pulse, and
15 the imaging semiconductor chip is stacked on the image processing semiconductor chip so that the timing pulse input terminal and the timing pulse output terminal are located close to each other.

11. The solid state imaging device according to claim 2, wherein the
20 imaging semiconductor chip comprises a plurality of terminals including an image signal output terminal for outputting an image signal,
the image processing semiconductor chip comprises a plurality of terminals including an image signal input terminal for receiving the image signal, and
25 the imaging semiconductor chip is stacked on the image processing semiconductor chip so that the image signal output terminal and the image signal input terminal are located close to each other.

12. Equipment comprising:
30 the solid state imaging device according to claim 1; and
an image processing portion for processing a static image or a dynamic image produced by the solid state imaging device.

13. The equipment according to claim 12, wherein the equipment is a
35 cellular phone.

14. The equipment according to claim 12, wherein the equipment is an

information terminal.

15. The equipment according to claim 12, wherein the equipment is a digital still camera.

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